

IN THE CLAIMS

Please amend the claims as follows:

1. (original) Echo canceller system (1), comprising an audio matrix decoder (2) coupled to audio inputs (3) for providing multiple audio output signals ($x_1 \dots x_5$), and a multi-channel echo canceller (5) coupled to the audio inputs (3), characterized in that the echo canceller system (1) further comprises audio receiving means (7) for receiving a mixture of the audio output signals ($x_1 \dots x_5$) and a wanted signal (e), and that the multi-channel echo canceller (5) is coupled to the audio matrix decoder (2) for using the audio matrix coefficients with multi-channel echo cancellation for deriving the wanted signal (e) from the mixture.
2. (original) Echo canceller system (1) according to claim 1, characterized in that the echo canceller system (1) comprises an active matrix tracker (9) coupled to both the audio inputs (3) and matrix decoder outputs (10) for deriving the audio matrix coefficients therefrom.
3. (currently amended) Echo canceller system (1) according to claim 1 ~~or 2~~, characterized in that the multi-channel echo

canceller (5) calculates a number of filter functions with is less than the number of the multiple audio output signals ($x_1 \dots x_5$).

4. (original) Echo canceller system (1) according to claim 3, characterized in that the filter functions calculations are based on filter update contributions which take account of at least some of the audio output signals ($x_1 \dots x_5$).

5. (currently amended) Echo canceller system (1) according to ~~one of the claims 1-4~~claim 1, characterized in that the echo canceller (5) comprises a speech detector (11) coupled to reducing the number of independent multiple output signals ($x_1 \dots x_5$) once speech is detected.

6. (currently amended) Multi-channel audio system, for example a Hi-Fi set, a car audio system or a television or teleconferencing system, comprising an echo canceller system (1) according to ~~one of the claims 1-5~~claim 1, the echo canceller system (1) comprising an audio matrix decoder (2) coupled to audio inputs (3) for providing multiple audio output signals ($x_1 \dots x_5$), and a multi-channel echo canceller (5) coupled to the audio inputs (3), characterized in that the echo canceller system (1) further comprises audio receiving means (7) for receiving a mixture of the audio output

signals ($x_1 \dots x_5$) and a wanted signal (e), and that the multi-channel echo canceller (5) is coupled to the audio matrix decoder (2) for using the audio matrix coefficients with multi-channel echo cancellation for deriving the wanted signal (e) from the mixture.

7. (currently amended) Communication system, such as a mobile or hands free communication system, in particular a telephone system, car telephone system, comprising an echo canceller system (1) according to ~~one of the claims 1-5~~claim 1, the echo canceller system (1) comprising an audio matrix decoder (2) coupled to audio inputs (3) for providing multiple audio output signals ($x_1 \dots x_5$), and a multi-channel echo canceller (5) coupled to the audio inputs (3), characterized in that the echo canceller system (1) further comprises audio receiving means (7) for receiving a mixture of the audio output signals ($x_1 \dots x_5$) and a wanted signal (e), and that the multi-channel echo canceller (5) is coupled to the audio matrix decoder (2) for using the audio matrix coefficients with multi-channel echo cancellation for deriving the wanted signal (e) from the mixture.

8. (currently amended) Signals for use in the echo canceller system (1) according to ~~one of the claims 1-6~~claim 1, the echo canceller system (1) comprising an audio matrix decoder (2) coupled

to audio inputs (3) for providing multiple audio output signals ($x_1 \dots x_5$), and a multi-channel echo canceller (5) coupled to the audio inputs (3), characterized in that the echo canceller system (1) further comprises audio receiving means (7) for receiving a mixture of the audio output signals ($x_1 \dots x_5$) and a wanted signal (e), and that the multi-channel echo canceller (5) is coupled to the audio matrix decoder (2) for using the audio matrix coefficients with multi-channel echo cancellation for deriving the wanted signal (e) from the mixture.